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These objectives have been achieved by the fact that the claimed endoscope comprises:

- an invaginator made of everting tube, arranged by pleats, formed in the shape of compact hollow cylinder;

- a disposable cartridge combining the invaginator with auxiliary elements;

- an endoscopic tube ensuring fixation of a cartridge;

- a mechanism for introduction of tube, ensuring together with a cartridge insertion of a tube;

- a system of extraction-intraction of traction lines ensuring bending of the tube's distal end with hydro-manual or pneumo-manual or hydraulic or pneumatic drive;

- a hydraulic or pneumatic intensifier of introduction and extraction of biopsy forceps and hydraulic or pneumatic intensifier of traction line of biopsy forceps.

A compact hollow cylinder of the invaginator can be formed of tightly compressed in longitudinal and transverse directions pleats of different forms of an eversible thin-walled tube placed at any angles with the longitudinal axis of an endoscopic tube. The cylinder has recurrent narrowings of an external diameter and widenings of its internal diameter. The stability of diameters depends on the compactness of the cylinder. In one of the embodiments the definite compactness of cylinder ensures the gap with endoscopic tube during their joining and in the process of invagination, in the other - only during the joining. There are possible also the interim variants of embodiments.

A disposable sterile cartridge for invagination consists of a shell which has a projection at its proximal end, comprising: an invaginator; a compressed spring; its fixator; a spring distancer in which the distal seal of the endoscopic tube is located, which is joined to an uneverted end of the invaginator; a preservative of the distal part of the endoscopic tube joined at the proximal end to a spring stop, but at the distal end - to the tip with elements for hermetic joining to the endoscopic tube, while on the shell is located a proximal seal of the endoscopic tube with the anal dilator having the channel in its wall, but at the distal end of the shell the everted end of the invaginator is fastened. In addition to elements for hermetical joining to the endoscopic tube, the tip may have a protective glass and a channel for glass washing.

An endoscopic tube is supplemented with: - an internal transverse pleats of its external cover; - two air-ducts, the larger one has a lateral opening into the cavity of the proximal seal of the disposable cartridge for invagination, but the smaller - into the cavity of distal and proximal preservatives; - areas for hermetical fixation of preservatives' ends; - a proximal preservative.

The mechanism for introduction of the endoscopic tube consists of the cylinder with two pistons, which are interconnected with distancers and an elastic tube. The cylinder is joined with the cartridge for invagination of the endoscopic tube. The cavity between pistons and the elastic tube is connected to the source of pressure or atmosphere (negative pressure) through the cock. The cavity between the distal piston and the proximal seal of the endoscopic tube through the cock is connected to the source of negative pressure or atmosphere (overpressure). The cocks can be placed in the pedals but the spring, which returns pistons to their home position can be located in the cavity between the proximal seal of endoscopic tube and the distal piston.

The system of extraction-intraction of traction lines ensuring management over the endoscopic tube's distal end, has a hydro-manual or pneumo-manual or hydraulic or pneumatic drive and creates exertion at the distal end of traction lines. The system includes sources of overpressure and negative

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Amended claims

I claim:

1. An endoscope, comprising an invaginator, which is a thin-walled tube, compactly placed on the distal part of an endoscopic tube in the shape of small layers and/or pleats.
- 5 2. The endoscope according to claim 1, wherein said invaginator is formed in the shape of a compact hollow cylinder, which has a gap with the distal part of the endoscopic tube.
3. The endoscope according to claim 2, wherein said cylinder has a compactness, which ensures said gap in the process of invagination of the endoscopic tube.
4. The endoscope according to any of claims 1 to 3, further comprising a seal between the endoscopic
10 tube and the uneverted end of said invaginator.
5. The endoscope according to any of claims 1 to 3, further comprising a shell of said invaginator, commensurate to the diameter of said invaginator and to the length of rectum.
6. The endoscope according to any of claims 1 to 3, further comprising a preservative of the distal part of the endoscopic tube.
- 15 7. An endoscope, comprising a disposable cartridge for the invagination of an endoscopic tube, which has:
 - an invaginator which is a thin-walled tube, formed by small layers and/or pleats in the shape of a compact hollow cylinder, which has a gap with the distal part of the endoscopic tube.
 - a seal between the endoscopic tube and the uneverted end of said invaginator,
 - 20 • a shell of said invaginator, commensurate to the diameter of said invaginator and to the length of rectum,
 - a preservative of the distal part of the endoscopic tube.
8. The endoscope according to claim 7, wherein said cylinder has a compactness, which ensures said gap in the process of invagination of the endoscopic tube.
- 25 9. The endoscope according to any of claims 1, 2, 3, 7, 8, further comprising a seal of the endoscopic tube, which hermetizes a cavity of the everted part of said invaginator.
10. The endoscope according to any of claims 1, 2, 3, 7, 8, further comprising a spring of said invaginator.
11. The endoscope according to any of claims 1, 2, 3, 7, 8, further comprising a removable tip of the
30 endoscopic tube.
12. The endoscope according to claim 11, wherein said tip further comprises a protective glass.
13. The endoscope according to claim 12, wherein a cavity of said tip communicates with a cavity of intestines.
14. The endoscope according to any of claims 1, 2, 3, 7, 8, further comprising an anal dilator.
- 35 15. The endoscope according to any of claims 1, 2, 3, 7, 8, wherein the endoscopic tube further comprises a distal drives of traction lines, bending its distal end, which are cylinder-piston units, connected to the pressure of gas or liquid.
16. The endoscope according to any of claims 1, 2, 3, 7, 8, further comprising a biopsy forceps, which are a flexible hermetic tube, on the distal end of said tube is placed a piston of a biopsy channel.
- 40 17. The endoscope according to claim 16, further comprising a distal drive of traction line of a cutters of said biopsy forceps.
18. An endosoope comprising a mechanism for introduction of an endoscopic tube, which is a cylinder-piston unit, connected to the pressure of gas or liquid.